Recombinant ADDA protein (His tag)

Catalog Number	542292
Synonyms	Erythrocyte adducin subunit alpha
Species	Human
Expression System	E. coli
Accession	P35611
Molecular Weight	Predictes a molecular mass of 31.72 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 32 kDa band.

Product Information

Sequence Region	125-398
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 125-398 aa (P35611) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Alpha-adducin (Erythrocyte adducin subunit alpha) fragment (residues 125-398) is a stable and soluble protein unit derived from the human ADD1 gene. This fragment is optimized for structural and biochemical studies, offering researchers a reliable tool to investigate the membrane-cytoskeleton-associated functions of adducin. Alpha-adducin, encoded by the ADD1 gene in humans, is a membrane-cytoskeleton-associated protein that plays a critical role in promoting the assembly of the spectrin-actin network, which is essential for maintaining cell membrane integrity and cytoskeletal organization. It also binds to calmodulin, suggesting involvement in calcium-dependent regulatory processes. The protein is localized to the cytoplasm and cytoskeleton, and it associates peripherally with the cell membrane on the cytoplasmic side, highlighting its importance in linking the cytoskeleton to the membrane. The fragment (residues 125-398) was selected computationally to ensure stability and solubility, facilitating experimental applications without compromising functional relevance.